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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/540,048

06/22/2005

Shoichi Kishimoto

14434.86USWO

8676

52835

7590

11/10/2008

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EXAMINER

HOBAN, MATTHEW E

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

11/10/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/540,048	<b>Applicant(s)</b> KISHIMOTO ET AL.	
	<b>Examiner</b> Matthew E. Hoban	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 19-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/14/2005</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

Claims 19-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 7/23/2008. The applicants do not traverse the nature of the election requirement and only traverse in order to preserve the claims for possible rejoinder later. Thus this requirement is deemed to be proper and is thus made final. Applicant's election of claims 1-18 in the reply filed on 07/23/2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8, 10-14 and 16-18 are rejected under 35 U.S.C. 102(a) as being anticipated by Kakui in 7,170,674.

Art Unit: 1793

Kakui teaches glass compositions for a fluorescent glass useful in a light amplification module, specifically as an optical fiber (See Column 3, Lines 5-25). Generally, Kakui teaches a glass containing at least 50 mol% of SiO<sub>2</sub> GeO<sub>2</sub> or P<sub>2</sub>O<sub>5</sub> having bismuth oxide as a dopant, and also containing at least one selected from BaO, CaO, Na<sub>2</sub>O, B<sub>2</sub>O<sub>3</sub>, Ga<sub>2</sub>O<sub>3</sub>, Ta<sub>2</sub>O<sub>5</sub>. The composition should also contain Alumina (See paragraph bridging Columns 4 and 5).

**Regarding Claim 1-2, 7-8, 10-14, and 16:** Kakui teaches a composition designated sample I at Column 6, Lines 16-25 having the composition 30 mol% BaO, 10 mol% Al<sub>2</sub>O<sub>3</sub>, 60 mol% P<sub>2</sub>O<sub>5</sub>, and .8 mol% Bi<sub>2</sub>O<sub>3</sub>. This composition meets all of the requirements of the instant claims.

**Regarding Claims 3-6:** Figure 2 gives the luminescent spectrum of composition I, this composition has a peak emission at 1250 nm, where the half-height width of the spectrum is nearly 275 nm. It was stated at the paragraph bridging columns 5 and 6, as well as at lines 20-25 of column 6, that the absorption peak of Bi doped glass such as these is between 500 and 700 nm, although the light incident in Fig. 2 is of 800 nm light.

**Regarding Claim 9:** As stated previously, Kakui teaches a general composition including a glass network former chosen from SiO<sub>2</sub>, GeO<sub>2</sub>, and P<sub>2</sub>O<sub>5</sub> in an amount of at least 50 mol%. To this is added bismuth oxide as a dopant as well as alumina.

Art Unit: 1793

Finally glass constituents are added, selected from the group containing Na<sub>2</sub>O. Thus Kakui teaches the claimed composition.

**Regarding Claim 17-18:** Use of the composition as a fiber is described at Column 8, Lines 40-55. This fiber is used in a light amplifier module as described as is described in the rest of this column.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

Art Unit: 1793

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hormadaly in 4,961,999.

Hormadaly discloses a glass composition having overlapping ranges of the components as recited in claim 15. The composition of the glass used as the inorganic binder of Hormadaly is given from Column 2, Line 40 through Column 3, Line 35. This glass generally contains from 25-55 mol% of B<sub>2</sub>O<sub>3</sub>, from 10-30 wt% of Al<sub>2</sub>O<sub>3</sub>+Bi<sub>2</sub>O<sub>3</sub>, and ZrO<sub>2</sub>, as well as the addition of such oxides as ZnO in an amount no greater than 15 wt%. The compositional ranges of Hormadaly thus represent an overlapping range with the claimed invention and thus make them prima facie obvious. One of ordinary skill in the art would be well equipped to select from the portion of these overlapping ranges and arrive at the invention as claimed. It has been held that overlapping ranges create a prima facie case of obviousness. See MPEP 2144.05.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Hoban whose telephone number is (571) 270-3585. The examiner can normally be reached on Monday - Friday from 7:30 AM to 5 PM EST.

Art Unit: 1793

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J.A. LORENZO/

Supervisory Patent Examiner, Art Unit 1793

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